



President's Message

by Tom Kinahan, N1CPE

Happy New Year! How do you feel about radar detectors? I've recently learned that the Commonwealth of Massachusetts is attempting to prohibit the use of radar detectors. Granted, people who use them are expecting a license to drive faster than the speed limit, which it isn't. I've asked a few opinions, but what is yours? The issue here is not being able to avoid tickets, if you drive too fast or dangerously, you should pay the penalty. The issue, in my opinion, is the recent flock of legislation on both the state and federal level limiting what you can do with the RF around you. The recent Communications Privacy Act on the federal level and the proposed law to prohibit radar detectors on the state level limit my right to use the RF that is flowing through my body and my property. This I believe is wrong and improper.

If there is some RF signal, flowing through my body, or my property, it is mine. Therefore, I can do with it as I may wish. I could decode it for my private use, warm my house with it, cook food with it and nobody can tell me otherwise. The Communications Privacy Act prohibits you and me from listening to cellular phone conversations. Satellite TV distributors have law behind them that says that you must pay to view their

services if they ask and the Commonwealth of Massachusetts is trying to pass a law that prohibits me from detecting radar. I say NO! Once that RF goes onto my property, into my car, through my body, it's mine. I'll concede that the transmitting side of that RF can and should do anything it desires to prevent me from decoding or detecting that RF, if that's what he wants, but nobody can tell me that I can't use that RF that is on my property for any purpose I like.

I've said some pretty harsh words here, I'm certainly interested in your opinions on the subject. Please, let your ham and non-ham friends know about these limitations to your and my rights.

Al Graf Memorial WAS

To: The Officers and Members of the Wellesley A.R.S.

Subject: WAS contest on 10 meters for all members

Dates: To be determined.

I suggest a contest conducted by the club called the Al Graf Memorial WAS in which Wellesley Amateur Radio Society Members would compete to work as many states as possible in the allotted time of approximately 4 months.

Several years ago we held a WAS contest and the winner managed to work 49 states. Verification is up for discussion, whether QSLs or on the honor system. This seems like a very good topic for discussion for a Wednesday evening net.

H. J. McDade, W1LMU

January VHF Sweepstakes

The January VHF Sweepstakes is coming up the second weekend of January. Please participate on any of the VHF bands, on FM or SSB or CW and submit your logs to W.A.R.S. and we'll have an award for the top finisher in the club. Check out December QST for more information on exactly how this works, or contact Tom Kinahan for more information.

MEETINGS THIS MONTH: _____

January 7, 1987 at 7:30 P.M.
January 21, 1987 at 7:30 P.M.
211 Washington St., Wellesley

Repeater

As of early January, the repeater emergency autodial system will go back on line. In the new system, we can only call the Wellesley Police, Newton 911, and the State Police in Boston.

When using the system, think about what you are going to say. And state clearly that a) you are an amateur radio operator (dispatchers typically understand how radios work and will wait until you are done talking if they know you are on a radio.) b) State the emergency (accident, fire, etc.), c) Any injuries? d) The exact location (what road, which direction, what town it's in if you know it), e) make sure they understood the problem. (If you are running your words together in a hurried manner, you can't be understood) and f) say 'OVER' at the end of each transmission.

An Example follows:

"This is N1CPE on the Autodial calling the State Police."

Dial the code.

"State Police Boston, Dispatcher Smith can I help you?"

"This is an amateur radio operator calling, there is a car accident, without injuries on the Mass. Turnpike, Westbound, at mile marker one hundred twelve, OVER."

"Ok, accident, no injuries, Mass. Pike, west at mile 112, right?"

"Yes, that is correct."

"Thank you, I'll get someone out there right away."

"Thank you, this is N1CPE clearing the call."

Dial the hang up code.

In the new system, If you have an emergency in Newton call the Newton 911 line, and if in Wellesley, call the Wellesley police number. Anywhere else, please call the State police number. State the entire situation and the town you are in, and they can relay the message for you to the appropriate agency.

The numbers will not be printed in the Spark Gap for security reasons. If you operate a 2 meter radio and desire the codes to make these emergency calls, please

come to a meeting and ask for the list, or send us a self addressed stamped envelope to the club address and we will send you a list of the codes.

If you have occasion to use these emergency features, please drop us a line at the club, or let us know in some way that you were successful.

From The Mailbag

Tom Kinahan, N1CPE
Wellesley A.R.S.
211 Washington St.
Wellesley, Ma. 02181
21 December 1987

Tom,

In the most recent issue of The Spark Gap, there was an article about the proposed revisions to part 15 of the FCC rules (87-389). While the revision is something that will impact the Amateur Radio Service, one point was made in the article that I believe was not true.

I think the origin of the misinformation was the shortwave community and that it was widely distributed by the New England network conference on 220 MHz a few weeks ago. Specifically, the Voice of America standard which defines good reception of their signals in a target country is not 1uV/m but 1 mV/m, one millivolt, not one microvolt.

Your comments about section 15.29(b) seem to stretch the point much too far. There may be need for clarification, but over-reaction won't help.

The deadline for comments has been extended until March 7, 1988....

73,
Tom Frenaye, K1KI
ARRL Director
New England Division
23 Pinehurst Road
Unionville CT 06085

(I hope this clarifies the matter for everyone, and my apologies for misleading you all. - Tom Kinahan, N1CPE)

U.S. Constitution

As part of the celebration of the Bicentennial of the United States Constitution, we have ordered a quantity of pocket sized versions of the Constitution. If you would like one, drop us an SASE or stop by at a meeting, and you can get one. (continued)

The Spark Gap

Official Journal of the Wellesley Amateur Radio Society

Editor :

Jon Freeman, KC1FD
17 East Meadow Road
Lowell, Ma. 01854

The Spark Gap is a monthly publication of the Wellesley Amateur Radio Society, its sole purpose is to keep its members abreast of current happenings, FCC rule & regulation changes and to list equipment offered for sale or trade by members. Members are encouraged to contribute to the Spark Gap and may send their articles to the Editor's address or to the club address. Items printed in the Spark Gap may be reprinted by other Amateur Radio publications provided the author and the Spark Gap are given credit.

The Wellesley Amateur Radio Society is dedicated to the promotion of Amateur Radio through instruction, fellowship, demonstration and participation. Annual membership in the society is \$15 and the club year runs from September 1 through August 31. Amateur Novice through Advanced classes are conducted regularly at no cost. To enroll in a class or gain information about the Society in general, write :

The Wellesley Amateur Radio Society
211 Washington Street
Wellesley, Ma. 02181



This ties in with our W200TKZ operation. It's been suggested that participating radio clubs send a message to the Bicentennial Commission stating that the club has read and 'ratified' the Constitution as part of amateur radio's participation in the bicentennial celebration.

Churchill's Wizard War

Part II

by Vern Valero

The illusion of the British Isles is that of a fog-bound and rainy place. Churchill had hoped that such nasty weather would work against the German air force, and it did to an extent. However, the enemy soon invented mechanisms for dealing with foul weather.

Navigation in the 1940's was difficult for pilots in poor weather. Getting back to the air bases in France and Norway was a top priority after a bombing run over

England. As an aid to the pilots, the Germans installed a series of radio beacons across Europe. A pilot could decide the right direction by using radio direction finding techniques against several of the beacons.

The British built stations called 'Meacons' that rebroadcast the German beacon information. Operation of the meacons caused many pilots to fly off course. There was a case of one German pilot who landed his bomber in Devon, England instead of France. He must have been mildly surprised to see folks driving on the left side of the road!

The Germans then invented a method for guiding bomber pilots to their intended targets. It involved sending high power VHF beams from two different locations to the target area. When the pilot detected that the beams had crossed, he was on target.

The British had a delay in developing a countermeasure to the beam mechanism which the Germans had code-named Knickebein. It worked well and boosted the confidence of Hermann Goering and the German High Air Command.

Finally the British did develop a means of bending the beams to misguide pilots to non-target areas. In Churchill's words: "An officer in my Defence Office sent his wife and two young children to the country during the London raids. Ten miles away from any town they were very much astonished to see a series of enormous explosions occurring three fields away. They counted over a hundred bombers. They wondered what the Germans were aiming at, and thanked God that they were spared." (continued)

OFFICERS

President

Tom Kinahan, N1CPE, 877-3456

Vice President

Rita Baker, N1DDI, 481-0863

Recording Secretary

Roger Smith, W1EOA, 235-6239

Corresponding Secretary

Kathy Pate, KA1IYR, 785-1801

Treasurer

C.J. McDonald, WB1BUM, 332-6091

Fund Raising

David Kent, N2AWG, 875-2126

Operations Chairman

Vern Valero, ND1Z, 533-6822

Despite the fact that the Germans knew they were being outsmarted, use of the Knickebein persisted for some time. Goering had become overconfident about this device. Nobody seemed to have the courage to tell Goering that he might be wrong.

The British defense included a device known as a sky or aerial mines. Airplanes dropped long wires with explosives attached at various levels. The wires' descent was slowed by large parachutes or helium balloons. Presumably, enemy bombers would be caught in these spider-webs and destroyed. In reality the sky mines were more effective against the V1 rockets which could not avoid entrapment.

The German V1 rocket was actually a primitive cruise missile. It had a simple and noisy jet engine. Its navigation mechanism consisted of a magnetic compass and three gyroscopes. A servo mechanism provided course correction. The V1 had a small propeller mechanism at its nose. After a preset number of revolutions of the propeller, the rocket would dive for the ground and explode.

Approximately 2400 V1's hit the London area. At first the attacks were successful, but the V1 made an easy target for fighter pilots. BBC radio had a nasty habit of misreporting V1 landing sites. The Germans believed what they heard with the result that intended targets were not often hit. Soon most V1 rockets were shot down or trapped in the air. All V1 firings ceased suddenly when their launch site was captured by Allied troops.

The V2 rocket was a more sophisticated weapon. A true ballistic missile, the rocket hit its target at speeds in excess of mach 3. There was no defense against the V2.

The Germans had many problems getting the V2 into production. It required approximately 50,000 engineering changes to get the rocket working. Problems ranged from poor wiring to the inability of metal structures to withstand mach 3 stresses.

Although the V2 was introduced too late to have an impact on the war, it did provide a foundation for later work. The experience gained from the V2 was used in the development of today's Intercontinental Ballistic

Missiles and the NASA space vehicles.

- Sources: 1. The Second World War: Volume II, Churchill, Houghton Mifflin, 1949
2. IEEE Spectrum, November 1987

W.A.R.S. Bicentennial of the U.S. Constitution Station

Wellesley A.R.S. has recently received approval from the FCC and ARRL to operate W200TKZ during the week of February 6 0000Z, 1988 until February 12 2359Z, 1988. We are looking for people to operate W200TKZ primarily for the daylight weekend hours and evening weekday hours. We'd sure like weekday operators of W200TKZ if you have the time. If you don't know what to do when operating a special event station, please ask, it's really easy and fun! Please sign up by calling Tom Kinahan, N1CPE at 877-3456 or at a club meeting.

Membership Raffle

The following people still have raffle prizes waiting for them at the club, please stop by at a meeting to get them, they are : Joe Green K2VUI, Ralph Vacca W1KF, Jim Charboneau KC1BB. If you don't know what you won, reread December 1987 Spark Gap or show up and we'll surprise you!

The Grand Prize winner, Charles Stevens KA1DHV, informed us that he already had a dummy load and wished to donate it back to the club for another to use. As a result, another raffle will be held at the January 21 meeting to give away the Heathkit Cantenna Dummy load.

Wellesley Amateur Radio Society

W1TKZ
211 Washington St.
Wellesley Ma. 02181
12 January 1988

For Immediate Release

As part of the celebration of the Bicentennial of the United States Constitution, the Wellesley Amateur Radio Society will operate special events amateur radio station W200TKZ for the Week of February 6 through the 12th 1988 from the Wellesley Massachusetts Red Cross building, 211 Washington St. Wellesley, Massachusetts.

The Federal Communications Commission and the American

Radio Relay League have approved the Wellesley club station to use the special callsign W200TKZ, 200 standing for the 200th anniversary of the Constitution, for this week, specifically celebrating the Commonwealth of Massachusetts' ratification of this document, the sixth state to do so.

The purpose of this operation is to acquaint the public with amateur radio. In that regard, the Wellesley operation will be open to the public for observation on February 6 and 12 from 1pm to 5pm, and February 7 through 11 starting at 6pm until 8pm. Other times can be arranged.

Our goal is to contact all 50 states and as many foreign countries as possible proclaiming the 200th anniversary of Massachusetts' ratifying the Constitution.

For more information on Amateur Radio, or about this special operation contact Tom Kinahan at 617-877-3456 or write the above address.

W.A.R.S. Winter Speaker

Schedule

Here's a chronological list of the SUPER line-up of W.A.R.S. speakers for the winter of '88 :

January 21 : WX NETS
Marc Stern, N1BLH

February 18 : Building A RTTY Modem
Mort Cohan, KA1IU

March 17 : Emergency Communications
Barry Porter, KB1PA
Stoughton, Ma.
Eastern Mass ARRL Section Manager
and Section Emergency Coordinator

QSL Cards

Stay tuned for next month's Spark GAP issue for an order form for official W.A.R.S. QSL cards. Last month we stated that we could pass along a savings due to volume ordering. Currently, this does not appear to hold true with the quantities that we are considering. The prices including the club's treasury share look to be about average. But, we hope to investigate and resolve this issue soon, as we have only investigated one printing source so far. At least the cards will be the "Official W.A.R.S. QSL Card," and the club will

gain a small benefit to boot.

Poem of The Month

WINNER !!!

As you all know we had a contest for the Poem of the Month in our December issue of the Gap which included two hammed-up versions of The Night Before Christmas. Well here is the moment you have all been waiting for, the announcement of the WINNER !!! By unanimous decision the winning poet is Frank, NG1I, for his article on Police/Amateur Communications which everyone conceded had the best rhyme. Congratulations, Frank, bet you didn't realize you had that hidden talent. Ever think of moonlighting ? By the way, it looks as though we started a trend. The group on 664 sounded as though they were going to start their own poetry contest after they read our poems over the air.

DX News

from ARNS

extracted (a long time ago) by Nels, K1UR

Your DX editor had the pleasure of meeting Niles Weyernut recently, after the DX Forum at the Orlando Hamradiovacation. Niles had just returned from his DX-pedition to Ambrosia Island, the Arctic energy source, and filled us in on the details of his unusual trip. Operation was from 101' Mt. Smirnoff, highest point on the island, where a clear shot was had in all directions. Equipment included two Model 19 Teletypes complete with matching desks and power supplies, a Western Union DESKFAX, and a Harvey Wells Bandmaster DeLuxe. A Meisner Signal-Sifter was also brought along but was lost in an unfortunate accident before it could be used. Over 4100 contacts were made in the first 25 seconds of operation, thanks to the efficiency of break-in RTTY, and the use of a "list" on a prearranged frequency. Niles commented that QSLs should have been received and filled out by now. The callsign was 1A1B. Non-list operation was not attempted. In other DX news, the League of Radio Relaying Americans announced that New Jersey would no longer count as credit for the United States toward the DX Honor Club (DXHC) award.

DXHC administrator Donald B. Quest explained that New Jersey would no longer count because no radio Amateur had ever submitted valid proof of actually being in New Jersey while operating, and also because New Jersey was administered by a separate government in Trenton, which was not known to issue Amateur licenses. When asked what country New Jersey would count for in the future, Mr. Quest replied, "Why, none, of course! DXHC rules are very clear on this point."



The Spark Gap



**WELLESLEY
AMATEUR RADIO
SOCIETY**

211 Washington Street
Wellesley, Ma. 02181



FIRST CLASS MAIL

WILLIAM HANLON N1ADY
49 VINE STREET
WRENTHAM, MA 02093